Abstracts

Characteristics of Metal-Insulator-Semiconductor Coplanar Waveguides for Monolithic Microwave Circuits

R. Sorrentino, G. Leuzzi and A. Silbermann. "Characteristics of Metal-Insulator-Semiconductor Coplanar Waveguides for Monolithic Microwave Circuits." 1984 Transactions on Microwave Theory and Techniques 32.4 (Apr. 1984 [T-MTT]): 410-416.

Using a full-wave mode-matching technique, an extensive analysis is presented of the slow-wave factor, attenuation, and characteristic impedance of a metal-insulator semiconductor coplanar waveguide (MISCPW) as functions of the various structural parameters. Design criteria are given for low-attenuation slow-wave propagation. By a proper optimization of the structure, performances comparable with or even better than those of alternative structures proposed in the literature are theoretically predicted.

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